

PATENT

1000 Eagle Gate Tower, 60 East South Temple | Salt Lake City, Utah 84111

Docket No. 15436.247.38.1

Art Unit

3663

(8QI) 533-9800 | FAX: (80I) 328-1707 | WWW.WNLAW.COM

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

application of

DiJaili et al.

Serial No.:

Confirmation No.:

10/017,200

Filed:

Dec. 14, 2001

6418

For:

SYSTEM AND METHOD FOR WAVELENGTH

CONVERSION USING VLSOA

Examiner:

Mark Hellner

Patent No.:

6,950,233 B1

Issue Date:

Sep. 27, 2005

### REQUEST FOR A CERTIFICATE OF CORRECTION **UNDER 37 C.F.R. § 1.323**

Attention: Certificate of Corrections Branch

P.O. Box 1450

Alexandria, VA 22313-1450

Commissioner for Patents

Certificate

AUG 2 5 2010

of Correction

#### **Dear Commissioner:**

In accordance with the provisions of 37 C.F.R. § 1.323, which implements 35 U.S.C. § 255, the Director is respectfully requested to issue a Certificate of Correction to correct mistakes in the above-identified patent. The enclosed Patent Office Form PTO/SB/44 reflects the desired corrections.

Payment in the amount of \$100, as set forth in 37 C.F.R. § 1.20(a) is submitted herewith to cover the costs for issuance of the requested Certificate of Correction. The Commissioner is hereby authorized to charge payment of any of the following fees that may be applicable to this communication, or credit any overpayment, to Deposit Account No. 23-3178: (1) any filing fees 08/24/2010 HVU0NG1 00000020 6950233

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required under 37 CFR § 1.16; (2) any patent application and reexamination processing fees under 37 CFR § 1.17; and/or (3) any post issuance fees under 37 CFR § 1.20. In addition, if any additional extension of time is required, which has not otherwise been requested, please consider this a petition therefore and charge any additional fees that may be required to Deposit Account No. 23-3178.

Dated this 17 day of Aug , 2010

Respectfully submitted,

Attorney for Applicant Registration No.: 50987 Customer No.: 22913

WORKMAN NYDEGGER 1000 Eagle Gate Tower 60 East South Temple Salt Lake City, UT 84111 Phone: 801-533-9800

Fax: 801-328-1707

### **CERTIFICATE OF DEPOSIT UNDER 37 C.F.R. § 1.8**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope addressed to: Attention: Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 20th day of August, 2010.

Respectfully submitted,

Transmitted:

REQUEST FOR A CERTIFICATE OF CORRECTION UNDER 37 C.F.R. § 1.323 PTO Form PTO/SB/44 and check No. 169730 in the amount of \$100

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5,299,054	3/1994	Geiger	359/251
5,305,412	4/1994	Paoli	385/122
5,436,759	7/1995	Dijaili et al	359/333
5,604,628	2/1997	Parker et al	359/344
5,754,571	5/1998	Endoh et al	372/20
5,771,320	6/1998	Stone	385/16
5,778,132	7/1998	Csipkes et al	
5,805,322	9/1998	Tomofuji	359/177
5,999,293	12/1999	Manning	
6,061,156	5/2000	Takeshita et al	359/117
6,115,517	9/2000	Shiragaki et al	385/24
6,128,115	10/2000	Chen et al	385/17
6,333,799	12/2001	Bala et al	359/128
6,335,992	1/2002	Bala et al	385/17

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Fouquet, J.E., Vankatesh, S., Troll, M., Chen, D., Schiaffino, S., and Barth, P.W., "Compact Scalable Fiber Optic Cross-Connect Switches," IEEE, 1999 Diest of the LEOS Summer Topical Meetings, Pages 59-60, 1999.

Ibrahim, M.M., "Photonic Switch Using Surface-Emitting Laser Diode and APD," 16th National Radio Science Conference, NRSC'99, Pages 1-8, Ain Shams University, Cairo, Egypt, February 2325, 1999.

Jeong, G., and Goodman, J.W., "Gain Optimization in Switches Based on Semiconductor Optical Amplifiers," Journal of Lightwave Technology, Vol. 13, No. 4, Pages 598-605, April 1995.

Kitamura, S., Hatakeyama, H., and Hamamoto, K., "Spot-Size Converter Integrated Semiconductor Optical Amplifiers for Optical Gate Applications," IEEE Journal of Quantum Electronics, Vol. 35, No. 7, Pages 1067–1074, July 1999.

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McAdams, L.R., Waverka, R.T., and Cloonan, J., "Linearizing High Performance Semiconductor Optical Amplifiers: Techniques and Performance," LEOS Presentation, Pages 363–364, 1996.

Mørk, J., and Mecozzi, A., "Semiconductor Devices for All-Optical Signal Processing: Just How Fast Can They Go?," IEEE Lasers and Electro-Optics Society 1999 12th Annual Meeting. LEOS'99, Vol. 2, Pages 900-901, November 811, 1999.

Mutalik, V.G., van den Hoven, G., and Tiemeijer, L., "Analog Performance of 1310nm Gain-Clamped Semiconductor Optical Amplifiers," OFC '97 Technical Digest, Pages 266-267, 1997.

Panajotov, K., Ryvkin, B., Peeters, M., Verschaffelt, G., Danckaert, J., Thienpont, H., Veretennicoff, I., "Poarisation Switching in Proton-Implanted VCSELs," 1999 Digest of the LEOS Summer Topical Meetings, Pages 55-56, July 26-30, 1999.

Qui, B.C., Ke, M.L., Kowalski, O.P., Bryce, A.C., Aitchison, J.S., Marsh, J.H., Owen, M., White, I.H., and Penty, R.V., "Monolithically Integrated Fabrication of 2x2 and 4x4 Crosspoint Switches Using Quantum Well Intermixing," 2000 International Conference on Indium Phosphide and Related Materials, Conference Proceedings, Pages 415-418, May 14-18, 2000.

Scheuer, J., Arbel, D., and Orenstein, M., "Nonlinear On-Switching of High Spatial Frequency Patterns in Ring Vertical Cavity Surface Emitting Lasers," 1999 IEEE LEOS Annual Meeting Conference Proceedings, 12th Annual Meeting, IEEE Lasers and Electro-Optics Society 1999 Annual Meeting, Vol. 1, Pages 123-124, November 8-9, 1999.

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Soulage, G., Doussière, P., Jourdan, A., and Sotom, M., "Clamped Gain Travelling Wave Semiconductor Optical Amplifiers as a Large Dynamic Range Optical Gate," Alcatel Alsthom Recherche, route de Norzay, 91460 Maroussis (France), 4 unnumbered pages, undated.

Tai, C., and Way, W.I., "Dynamic Range and Switching Speed Limitations of an N x N Optical Packet Switch Based on Low-Gain Semiconductor Optical Amplifiers," IEEE Journal of Lightwave Technology, Vol. 14, No. 4, Pages 525–533, April 4, 1996.

Tiemeijer, L.F., Walczyk, S., Verboven, A.J.M., van den Hoven, G.N., Thijs, P.J.A., van Dongen, T., Binsma, J.J.M., and Jansen, E.J., "High-Gain 1310 nm Semiconductor Optical Amplifier Modules with a Built-in Amplified Signal Monitor for Optical Gain Control," IEEE Photonics Technology Letters, Vol. 9, No. 3, Pages 309–311, March 1997.

Toptchiyski, G., Kindt, S., and Petermann, K., "Time-Domain Modeling of Semiconductor Optical Amplifiers for OTDM Applications," IEEE Journal of Lightwave Technology, Vol. 17, No. 12, Pages 2577-2583, December 1999.

Tiemijer, L.F., Thijs, P.J.A., Dongen, T.v., Binsma, J.J.M., Jansen, E.J., van Helleputte, H.R.J.R., "Reduced Intermodulation Distortion in 1300 nm GainClamped MQW Laser Amplifiers," IEEE Photonics Technology Letters, Vol. 7, No. 3, Pages 284–286, March 1995.

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Yoshimoto, N., Magari, K., Ito, T., Kawaguchi, Y., Kishi, K., Kondo, Y., Kadota, Y., Mitomi, O., Yoshikuni, Y., Hasumi, Y., Tohmori, Y., and Nakajima O., "Spot-Size Converted Polarization-Insensitive SOA Gate with a Vertical Tapered Submicrometer Stripe Structure," IEEE Photonics Technology Letters, Vol. 10, No. 4, Pages 510–512, April 4, 1998.

#### Column 1

Line 41, change "system" to --systems--

#### Column 4

Line 16, before "VLSOA" insert --a--

#### Column 6

Line 36, change "FIG. 5." to --FIG. 5b.--Line 64, change "FIG. 5" to --FIG. 5b--

#### Column 7

Line 18, change "FIG. 5," to --FIG. 5b,--

#### Column 12

Line 25, after "output" insert --114--Line 50, change " $\lambda^{t1}$ " to -- $\lambda_{t1}$ --

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#### Column 13

Line 34, change "allows" to --allow--

#### Column 16

Line 66, after "components" insert -- are kept--

#### Column 18

Line 8, change "fist" to --first--

Line 10, change "elect-mechanical" to --electro-mechanical--

#### Column 19

Line 13, change "System" to --system--

Line 18, change "Voltage" to --voltage--

Line 24, change "Optical" to --optical--

#### Column 20

Line 10, change "electro mechanical" to --electro-mechanical--

Line 11, after "variable position" insert --,--

#### Column 21

Line 46, change "input or" to --input for--

#### Column<sub>22</sub>

Line 12, change "rest" to --reset--

Line 22, change "Input" to --input--

Line 54, change "Input" to --input--

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Leuthold, J., Besse, P.A., Eckner, J., Gamper, E., Dülk, M., and Melchior, H., "All-Optical Space Switches with Gain and Principally Ideal Extinction Ratios," IEEE Journal of Quantum Electronics, Vol. 34, No. 4. Pages 622–633, April 1998.

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Mutalik, V.G., van den Hoven, G., and Tiemeijer, L., "Analog Performance of 1310nm Gain-Clamped Semiconductor Optical Amplifiers," OFC '97 Technical Digest, Pages 266-267, 1997.

Panajotov, K., Ryvkin, B., Peeters, M., Verschaffelt, G., Danckaert, J., Thienpont, H., Veretennicoff, I., "Poarisation Switching in Proton-Implanted VCSELs," 1999 Digest of the LEOS Summer Topical Meetings, Pages 55–56, July 26–30, 1999.

Qui, B.C., Ke, M.L., Kowalski, O.P., Bryce, A.C., Aitchison, J.S., Marsh, J.H., Owen, M., White, I.H., and Penty, R.V., "Monolithically Integrated Fabrication of 2x2 and 4x4 Crosspoint Switches Using Quantum Well Intermixing," 2000 International Conference on Indium Phosphide and Related Materials, Conference Proceedings, Pages 415–418, May 14–18, 2000.

Scheuer, J., Arbel, D., and Orenstein, M., "Nonlinear On-Switching of High Spatial Frequency Patterns in Ring Vertical Cavity Surface Emitting Lasers," 1999 IEEE LEOS Annual Meeting Conference Proceedings, 12th Annual Meeting, IEEE Lasers and Electro-Optics Society 1999 Annual Meeting, Vol. 1, Pages 123-124, November 8-9, 1999.

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Page <u>5</u> of <u>7</u>

PATENT NO.

: 6,950,233 B1

**APPLICATION NO.: 10/017,200** 

ISSUE DATE

: Sep. 27, 2005

INVENTOR(S)

: DiJaili et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Soto, H., Erasme, D., and Guekos, G., "All-Optical Switch Demonstration Using a Birefringence Effect in a Semiconductor Optical Amplifier," IEEE CLEO, Pacific Rim '99, Pages 888-889, 1999.

Soulage, G., Doussière, P., Jourdan, A., and Sotom, M., "Clamped Gain Travelling Wave Semiconductor Optical Amplifiers as a Large Dynamic Range Optical Gate," Alcatel Alsthom Recherche, route de Norzay, 91460 Maroussis (France), 4 unnumbered pages, undated.

Tai, C., and Way, W.I., "Dynamic Range and Switching Speed Limitations of an N x N Optical Packet Switch Based on Low-Gain Semiconductor Optical Amplifiers," IEEE Journal of Lightwave Technology, Vol. 14, No. 4, Pages 525–533, April 4, 1996.

Tiemeijer, L.F., Walczyk, S., Verboven, A.J.M., van den Hoven, G.N., Thijs, P.J.A., van Dongen, T., Binsma, J.J.M., and Jansen, E.J., "High-Gain 1310 nm Semiconductor Optical Amplifier Modules with a Built-in Amplified Signal Monitor for Optical Gain Control," IEEE Photonics Technology Letters, Vol. 9, No. 3, Pages 309–311, March 1997.

Toptchiyski, G., Kindt, S., and Petermann, K., "Time-Domain Modeling of Semiconductor Optical Amplifiers for OTDM Applications," IEEE Journal of Lightwave Technology, Vol. 17, No. 12, Pages 2577–2583, December 1999.

Tiemijer, L.F., Thijs, P.J.A., Dongen, T.v., Binsma, J.J.M., Jansen, E.J., van Helleputte, H.R.J.R., "Reduced Intermodulation Distortion in 1300 nm GainClamped MQW Laser Amplifiers," IEEE Photonics Technology Letters, Vol. 7, No. 3, Pages 284–286, March 1995.

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### UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

Page 6 of 7

PATENT NO.

: 6,950,233 B1

**APPLICATION NO.: 10/017,200** 

ISSUE DATE

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van Roijen, R., van der Heijden, M.M., Tiemeijer, L.F., Thijs, P.J.A., van Dogen, T., Binsma, J.J.M., and Verbeek, B.H., "Over 15 dB Gain from a Monolithically Integrated Optical Switch with an Amplifier," IEEE Photonics Technology Letters, Vol. 5, No. 5, Pages 529–531, May 1993.

Yoshimoto, N., Magari, K., Ito, T., Kawaguchi, Y., Kishi, K., Kondo, Y., Kadota, Y., Mitomi, O., Yoshikuni, Y., Hasumi, Y., Tohmori, Y., and Nakajima O., "Spot-Size Converted Polarization-Insensitive SOA Gate with a Vertical Tapered Submicrometer Stripe Structure," IEEE Photonics Technology Letters, Vol. 10, No. 4, Pages 510-512, April 4, 1998.

#### Column 1

Line 41, change "system" to --systems--

#### Column 4

Line 16, before "VLSOA" insert --a--

#### Column 6

Line 36, change "FIG. 5." to --FIG. 5b.--Line 64, change "FIG. 5" to --FIG. 5b--

#### Column 7

Line 18, change "FIG. 5," to --FIG. 5b,--

#### Column 12

Line 25, after "output" insert --114--Line 50, change " $\lambda^{t1}$ " to -- $\lambda_{t1}$ --

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It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

#### Column 13

Line 34, change "allows" to --allow--

#### Column 16

Line 66, after "components" insert -- are kept--

#### Column 18

Line 8, change "fist" to --first--

Line 10, change "elect-mechanical" to --electro-mechanical--

#### Column 19

Line 13, change "System" to --system--

Line 18, change "Voltage" to --voltage--

Line 24, change "Optical" to --optical--

#### Column 20

Line 10, change "electro mechanical" to --electro-mechanical--

Line 11, after "variable position" insert --,--

#### Column 21

Line 46, change "input or" to --input for--

#### Column 22

Line 12, change "rest" to --reset--

Line 22, change "Input" to --input--

Line 54, change "Input" to --input--

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